STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

DIVISION OF STRUCTURE DESIGN SERVICES & EARTHQUAKE ENGINEERING OFFICE OF STRUCTURE OFFICE ENGINEER

P.O. BOX 942874 SACRAMENTO, CA 94274-0001

COMPARATIVE BRIDGE COSTS

JANUARY 2002

The following tabular data gives some **general guidelines** for structure type selection and its relative cost. These costs should be used just for **preliminary estimates** until more detailed information is developed.

These costs reflect the 'bridge costs' only and *do not* include items such as: bridge removal, approach slabs, slope paving, soundwalls or retaining walls.

The following factors *must* be taken into account when determining a price within the cost range:

Factors for Lower End of Price Range	Factors for Higher End of Price Range		
	Long Spans, High Structure Height,		
	Environmental Constraints, Small		
	Project, Aesthetic Issues, Wet		
Short Spans, Low Structure Height, No Environmental Constraints,	Conditions (cofferdams required),		
Large Projects, No Aesthetic Issues, Dry Conditions, No Bridge Skew	Skewed Bridges		
Urban Location	Remote Location		
Seat Abutment	Cantilever Abutment		
Spread Footing	Pile Footing		
No Stage Construction	2 Stage Construction		

Factors That Will Increase the Price Over the High End fo the Price Range				
Structures With More Than 2 Construction Stages				
Unique Substructure Construction				
Widenings Less Than 15 ft.				

	(STR. DEPTH/MAX SPAN)		COMMON	COST RANGE	DEMARKS
STRUCTURAL SECTION	SIMPLE	CONTINUOUS	SPAN RANGE (feet)	(\$ / FT2)	REMARKS
RC SLAB	0.06	0.045	16-44	85-120	
RC T-BEAM	0.07	0.065	40-60	90-180	THESE ARE THE MOST COMMON TYPES AND ACCOUNT FOR ABOUT 80% OF BRIDGES ON CALIFORNIA STATE HIGHWAYS.
RC BOX	0.06	0.055	50-120	100-170	
CIP/PS SLAB	0.03	0.03	40-65	95-130	
CIP/PS BOX	0.045	0.04	100-150	80-150	
PC/PS SLAB	0.03 (+3" AC)	0.03 (+3" AC)	20-50	120-180	
PC/PS T, TT, 1	0.06 (+3" AC)	0.055 (+3" AC)	30-120	100-170	
BULB T GIRDER	0.05	0.045	90-145	100-195	NO FALSEWORK REQUIRED
PC/PS I	0.055	0.05	50-120	115-175	
PC/PS BOX	0.06	0.045	120-200	140-250	
STRUCT STEEL T	0.045	0.04	60-300	150-215	NO FALSEWORK REQUIRED

NOTE: Removal of a box girder structure costs from \$15 - \$20 per square foot.